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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LEE, ANDREW CHUNG CHEUN	
ART UNIT	**PAPER NUMBER**
2664	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/742,811	GREENBERG, CRAIG B.	
	Examiner	Art Unit	
	Andrew C Lee	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because Figure 3 for the flow chart the reference numerals for signaling indicated should not be encircled. (Circled A, B, C) According to 37 CFR § 1.84 Standards for drawings; (1) Reference characters (numerals are preferred), sheet numbers, and view numbers must be plain and legible, and must not be used in association with brackets or inverted commas, or enclosed within outlines, e.g., encircled. They must be oriented in the same direction as the view so as to avoid having to rotate the sheet. Reference characters should be arranged to follow the profile of the object depicted.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned and described in the description: Fig 4 (sheet 3 of 3), the reference terms "get_input_data_in_buffer(); i_protocol; I_user; feed_buffered_data(); demodulation(I_protocol, I_user)". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the

immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

- The term "Multi-protocol" in disclosure is indefinite. The Office requires the applicant provides more full, clear, concise and exact terms and meaning so as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor for carrying out his invention.
- Page 6, line 18, the term "according to the algorithm for the desired protocol"; lines 19-20, the term " decode the data according to the selected protocol" is lack of antecedent basis
- Page 9, line 11, the Office needs the clarification from the applicant for the term "during demolition of data".
- The Fig. 4 (sheet 3 of 3) is mentioned but not described in the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The disclosure fails to state or teach one of ordinary skill in the art the exact step of (i) as disclosed in step (h).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 recites the limitation "one of the protocols" in page 12, line 7; "another one of the protocol" in page 12, line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "each of the protocols" in page 12, line 15. There is insufficient antecedent basis for this limitation in the claim

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 to 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Raichle et al. (U.S. Patent No. 6603394 B2).

Regarding claim 1, Raichlc et al. discloses the limitation of demodulating antenna data containing multiple signals with a dynamically reconfigurable datapath in a plurality of protocols (column 2, lines 1-2), comprising of a) configuring the datapath for a respective one of the protocols (column 3, lines 11-13); b)demodulating the antenna data containing multiple signals with the datapath (column 4, lines 18-27); and c)repeating steps (a) and (b) for each of the protocols (column3, lines 11-13; column 4, lines 18-27).

Regarding claim 2, Raichlc et al. discloses the limitation of buffering the antenna data prior to step (a) (see Fig. 1A, column 4, lines 28-39).

Regarding claim 3, Raichlc et al. discloses the limitation of the data is for multiple users and step (c) comprises repeating steps (a) and (b) for the antenna data containing multiple signals of the multiple users (column 5, lines 54-57).

Regarding claim 4, Raichlc et al. discloses the limitation of the datapath is a dynamically reconfigurable communications processor (column 3, lines 51-57) and step (a) comprising configuring the processor for each of the respective protocols (column 5, lines 64-67; column 6, lines 1-2).

Regarding claim 5, Raichlc et al. discloses the limitation of each of the protocols is a communications protocol and step (b) comprising demodulating the antenna data containing multiple signals for a respective communications protocol with the processor (Fig 1C, column 5, lines 16-36).

Regarding claim 6, Raichlc et al. discloses the limitation of buffering the output data subsequent to demodulation by the datapath (column 8, lines 36-41).

Regarding claims 7 and 14, Raichlc et al. discloses the limitation of steps a) providing a dynamically reconfigurable datapath(column 3, lines 51-57); b) receiving the antenna data containing multiple signals(column 5, lines 22-29);c) configuring the datapath for one of the protocols (column 4, lines 39-43; column 5, lines 64-67; column 6, lines 1-2); d) demodulating the signals contained in the antenna data with the datapath (Fig 1A, column 45-54); e) reconfiguring the datapath for another one of the protocols (column 4, lines 39-43; column 5, lines 64-67; column 6, lines 1-25) ;and f) demodulating the signals contained in the antenna data with the datapath (Fig 1A, column5, lines 45-54).

Regarding claim 8, Raichlc et al. discloses the limitation of step g)repeating steps (c) - (f) for each of the protocols (column 4, lines 39-43; column 5, lines 64-67; column 6, lines 1-2; Fig 1A, column 5, lines 45-54; column 4, lines 39-43; column 5, lines 64-67; column 6, lines 1-25).

Regarding claim 9, Raichlc et al. discloses the limitation of the steps h) receiving new data (Fig 1A, column 45-54); and i)repeating steps (c) - (g) for the new data (column 4, lines 39-43; column 5, lines 64-67; column 6, lines 1-2; Fig 1A, column 5, lines 45-54; column 4, lines 39-43; column 5, lines 64-67; column 6, lines 1-25).

Regarding claim 10, Raichlc et al. discloses the limitation of the datapath is a reconfigurable communications processor and steps (c) and (e) comprise reconfiguring the processor for each of the protocols (column 4, lines 39-43; column 5, lines 64-67; column 6, lines 1-2; Fig 1A, column 5, lines 45-54; column 4, lines 39-43; column 5, lines 64-67; column 6, lines 1-25).

Regarding claim 11, Raichlc et al. discloses the limitation of steps (d) and (f) comprise demodulating the data with the communications processor configured for the desired protocol (column 4, lines 39-43; column 5, lines 64-67; column 6, lines 1-2; Fig 1A, column 5, lines 45-54; column 4, lines 39-43; column 5, lines 64-67; column 6, lines 1-25).

Regarding claim 12, Raichlc et al. discloses the limitation of comprising receiving the data for multiple users (column 5, lines 54-57); and (d) comprises demodulating the

signals contained in the antenna data for the users prior to reconfiguring the datapath in step (e) (column 4, lines 39-41).

Regarding claim 13, Raichlc et al. discloses the limitation of steps (c)-(f) for all of the data of all of the users (column 5, lines 54-57).

Regarding claim 15, Raichlc et al. discloses the limitation of the datapath is a dynamically reconfigurable communications processor (column 3, lines 51-57; column 4, lines 5-6).

Regarding claim 16, Raichlc et al. discloses the limitation of the step of repeating steps (a) - (h) for a new set of antenna data (column 5, lines 54-57; column 4, 39-43).

Regarding claim 17, Raichlc et al. discloses the limitation of the system comprising an input buffer for receiving the antenna data (Fig 1C, column 5, lines 29-32);a dynamically reconfigurable datapath operative to demodulate the signals contained in the antenna data in the plurality of protocols (column 2, lines 1-2);a controller in electrical communication with the datapath(column 4, lines 5-7), the controller operative to configure the dynamically reconfigurable datapath for another protocol after the data of each of the users has been demodulated(column 5, lines 46-54); and an output buffer for storing the demodulated data (column 4, lines 39-41).

Regarding claim 18, Raichlc et al. discloses the limitation of the input buffer is operative to repeatedly present the antenna data of the users to the datapath after each reconfiguration by the controller(column 4, lines 39-43).

Regarding claim 19, Raichlc et al. discloses the limitation of the dynamically reconfigurable datapath is a communications processor(column 4, lines 5-7; lines 11-13).

Regarding claim 20, Raichlc et al. discloses the limitation of the controller is configured to demodulate data for wireless communications(column 4, lines 18-22).

Regarding claim 21, Raichlc et al. discloses the limitation of the input and output buffers are memory devices (Fig 1B, column 4, lines 28-35).

Conclusion

The Examiner also recites a reference from Web:

"Chameleon's Reconfigurable Communications Process", by Brandon Eames, August 18, 2000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C Lee whose telephone number is (703) 305-8086. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (703) 305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACL 10 August 2004

Ajit Patel
Primary Examiner